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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,567	06/15/2005	Charles Trushell	US020593	9447
24737 7590 12/28/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER HOLLWEG, THOMAS A	
			ART UNIT 2879	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,567	Applicant(s) TRUSHELL, CHARLES	
	Examiner Thomas A. Hollweg	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-17 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment, received October 9, 2007 is acknowledged. No claims have been added or cancelled, thus claims 1-17 are currently pending.
2. Corrections to the drawing are acknowledged. Objections to the drawings are withdrawn.
3. Corrections to minor claim informalities are acknowledged. Objections to claims 9, 10 and 11 are withdrawn.
4. Corrections to claims 3 and 4 are acknowledged. Therefore, 35 U.S.C. 112, second paragraph, rejections of claims 3 and 4 are withdrawn.
5. Examiner notes that in the header of applicants correspondence, applicant has listed the incorrect application number. The correct application number, 10/538567, should be included on all future correspondence to avoid confusion.

Response to Arguments

6. The following Double Patenting and Prior Art rejections include a prior art reference teaching an alkaline earth metal borate getter in a fluorescent lamp. Applicant's arguments regarding a prior art reference showing this particular getter material, along with applicant's other arguments, are responded to by way of the following new Double Patenting and Prior Art rejections.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

8. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

9. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-6, 8, and 10-16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7, 11, 12, and 14-19 of U.S. Patent No. 6,919,679 B2 in view of Lagos, U.S. Patent No. 4,451,757. Although the conflicting claims are not identical, they are not patentably distinct from each other as follows:

a. Claim 1 is rejected over '679 claim 1 because '679 claim 1 contains all of the limitations of claim 1 except for the limitation that the getter material is comprised of an alkaline earth metal borate or mixtures thereof.

b. This type of getter material is well known in the art. Lagos teaches a lamp that includes an alkaline earth metal borate to increase the lumen maintenance in the lamp (col. 2, lines 1-11, col. 3, lines 36 & 62). Lagos teaches that the use of

alkaline earth metal borates inside the lamp envelope will improve the brightness and lumen maintenance of the lamp, but it does not identify the compound as performing a gettering function (col. 4, lines 32-59). However, Lagos is anticipatory with regard to this limitation because it need only identify the claimed getter material, and it does not need to disclose the specific utility (see MPEP 2121.04).

c. Therefore, this type of getter material is known in the art and using an alkaline earth metal borate getter in the device defined by the limitations of '679 claim 1 is considered to be a matter of design choice and would have been obvious to a person having ordinary skill in the art. In the specification, applicant even refers to the getters chosen for this invention as "alternative getter materials" (page 3, line9). It is noted that applicant's specific use of an alkaline earth metal borate getter is not shown to solve any of the stated problems or yield any unexpected result that is not within the scope of the claims of patent '679. Accordingly, the use of this getter compound is considered to be a matter of design choice.

d. Claim 2 is rejected over '679 claims 1 and 12 because '679 claims 1 and 12 together contain all of the limitations of claim 2 except for the obvious design choice of using an alkaline earth metal borate getter, therefore claim 2 is not patentably distinct from '679 claims 1 and 12.

e. Claim 3 is rejected over '679 claims 2 and 12 because '679 claims 2 and 12 together contain all of the limitations of claim 3 except that claim 3 uses an

alkaline earth metal borate getter as an obvious design choice alternative to the alkaline metal oxide of zinc oxide used in '679 claim 2. Therefore claim 3 is not patentably distinct from '679 claims 2 and 12

f. Claim 4 is rejected over '679 claims 3 and 12 because '679 claims 3 and 12 together contain all of the limitations of claim 4 except for the obvious design choice as stated in the rejection of claim 3 above, therefore claim 4 is not patentably distinct from '679 claims 3 and 12.

g. Claim 5 is rejected over '679 claims 4 and 12 because '679 claims 4 and 12 together contain all of the limitations of claim 5 except for the obvious design choice as stated in the rejection of claim 3 above, therefore claim 5 is not patentably distinct from '679 claims 4 and 12.

h. Claim 6 is rejected over '679 claims 5 and 12 because '679 claims 5 and 12 together contain all of the limitations of claim 6 except for the obvious design choice as stated in the rejection of claim 3 above, therefore claim 6 is not patentably distinct from '679 claims 5 and 12.

i. Claim 8 is rejected over '679 claims 7 and 12 because '679 claims 7 and 12 together contain all of the limitations of claim 8 except that claim 8 uses an alkaline earth metal pyroborate getter as an obvious design choice alternative to the alkaline metal oxide of zinc oxide used in '679 claim 7. Therefore claim 8 is not patentably distinct from '679 claims 7 and 12.

j. Claim 10 is rejected over '679 claim 11 because '679 claim 11 contains all of the limitations of claim 10 except for the obvious design choice as stated in the

rejection of claim 1 above, therefore claim 10 is not patentably distinct from '679 claim 11.

k. Claim 11 is rejected over '679 claim 14 because '679 claim 14 contains all of the limitations of claim 11 except for the limitation that the getter material is comprised of an alkaline earth metal borate or mixtures thereof. As stated in the rejection of claim 1 above, alkaline earth metal borate getters, taught by Lagos, are known in the art and using this type of getter in the device defined by the limitations of '679 claim 14 is considered to be an obvious design choice. Therefore claim 11 is not patentably distinct from '679 claim 14.

l. Claim 12 is rejected over '679 claims 15 and 19 because '679 claims 15 and 19 together contain all of the limitations of claim 12 except for the obvious design choice as stated in the rejection of claim 11 above, therefore claim 12 is not patentably distinct from '679 claims 15 and 19.

m. Claim 13 is rejected over '679 claims 16 and 19 because '679 claims 16 and 19 together contain all of the limitations of claim 13 except for the obvious design choice as stated in the rejection of claim 11 above, therefore claim 13 is not patentably distinct from '679 claims 16 and 19.

n. Claim 14 is rejected over '679 claims 17 and 19 because '679 claims 17 and 19 together contain all of the limitations of claim 14 except for the obvious design choice as stated in the rejection of claim 11 above, therefore claim 14 is not patentably distinct from '679 claims 17 and 19.

- o. Claim 15 is rejected over '679 claims 18 and 19 because '679 claims 18 and 19 together contain all of the limitations of claim 12 except for the obvious design choice as stated in the rejection of claim 11 above, therefore claim 15 is not patentably distinct from '679 claims 18 and 19.
- p. Claim 16 is rejected over '679 claim 1 because '679 claim 1 contains all of the limitations of claim 16 except for the limitation that the getter material is "effective to react with contaminants present in the lamp to the extent that arc instability after ignition of the lamp is substantially eliminated." Examiner notes that this claim limitation is drawn to a method of operating the claimed lamp and does not further limit the structure of the device. Therefore this clause is not germane to the issue of patentability of the device (see MPEP 2114), and claim 16 is not patentably distinct from '679 claim 1.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The base-coat of claim 17 contains "an amount of calcium nitrate and boric acid." The specification does not describe an embodiment

where the base-coat contains these two compounds. These compounds are only described as elements of the base-coat precursor material and are not described as components of the finished base-coat layer.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaduk et al., U.S. Patent No. 3,875,455, in view of Lagos.

15. With regard to claim 1, in figure 1, Kaduk discloses an electric lamp (1) comprising a lamp envelope (2) having an inner surface, a means (3, 4, 5) within the lamp envelope (2) for generating ultraviolet radiation, and a layer of luminescent material (12) adjacent to the inner surface of the lamp envelope (2) for generating visible light when impinged by ultraviolet radiation; and a base-coat layer (10, 11) between the inner surface of the lamp envelope (2) and the layer of luminescent material (12) for reflecting ultraviolet radiation which has passed through the layer of luminescent material (12) back into the luminescent material (12) for increasing the visible light output of the luminescent material (12) (col. 1, lines 12-19), said base-coat layer (10, 11) comprises a particulate non-fluorescent oxidic material (col. 1, lines 61) with a getter material (11) on its surface which reacts with contaminants present in the lamp (col. 4, line 53).

16. However, Kaduk does not expressly disclose that the getter material is an alkaline earth metal borate. Lagos teaches a lamp that includes an alkaline earth metal borate to increase the lumen maintenance in the lamp (col. 2, lines 1-11, col. 3, lines 36 & 62). At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the Kaduk lamp, using the alkaline earth metal borate, taught by Lagos, as the getter material. The modified lamp would have improved lumen maintenance and improved brightness.

17. Lagos teaches that the use of alkaline earth metal borates inside the lamp envelope will improve the brightness and lumen maintenance of the lamp, but it does not identify the compound as performing a gettering function (col. 4, lines 32-59). However, Lagos is anticipatory with regard to this limitation because it need only identify the claimed getter material, and it does not need to disclose the specific utility (see MPEP 2121.04). Kaduk and Lagos are analogous art because they are from the same field of discharge lamps.

18. The clause "means within the lamp envelope for generating ultraviolet radiation" does not invoke 35 U.S.C. 112, sixth paragraph treatment because a description of the structure for achieving the specified function is given in dependent claim 9 (see MPEP 2181).

19. With regard to claim 2, examiner notes that the claim limitation "wherein said getter material is formed upon thermal decomposition of a getter precursor material during lehring" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over

the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Kaduk and Lagos (see MPEP 2113). The Examiner notes further that Kaduk teaches the formation of the getter material from the thermal decomposition of a getter precursor material during lehring (col. 2, line 63 to col. 3, line 62).

20. Claims 3-6, and 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaduk and Lagos in view of Trushell U.S. Patent No. 5,552,665.

21. With regard to claim 3, the Kaduk lamp, modified by Lagos, discloses a base-coat layer (10, 11) having a contiguous layer of a borate of an alkaline earth metal or mixture thereof (Kaduk, col. 2, lines 37-46). However, Kaduk and Lagos do not expressly disclose that the base-coat layer is a particulate aluminum oxide. In figure 1, Trushell discloses a base-coat layer that comprises a particulate aluminum oxide (col. 6, lines 19-22).

22. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the modified Kaduk lamp with particulate aluminum oxide comprising the base-coat layer. Using particulate aluminum oxide will provide a reflecting base-coat layer that increases luminous efficiency. Kaduk, Lagos and Trushell are analogous because they are from the same field of endeavor of fluorescent lamps.

23. Examiner notes that the claim limitation "formed by exposing the particulate aluminum oxide during the lehring process to an effective amount of the precursor material of an alkaline earth metal borate getter compound" is drawn to a process of

manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation.

Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Kaduk, Lagos and Trushell (see MPEP 2113). Examiner further notes that Kaduk discloses forming the base-coat (10, 11) by exposing the base-coat mixture during the lehring process to an effective amount of the precursor material of a getter compound (col. 2, line 63 to col. 3, line 62).

24. With regard to claim 4, examiner notes that the claim limitation "base-coat is sintered just prior to the envelope being sealed during manufacture of said lamp" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Kaduk, Lagos and Trushell (see MPEP 2113). Examiner further notes that Kaduk discloses that the base-coat (10, 11) is sintered just prior to the envelope being sealed during manufacture of said lamp (col. 3, lines 60-63).

25. With regard to claim 5, Lagos teaches getter materials of calcium borate and barium borate (col. 3, lines 36 and 62).

26. With regard to claim 6, examiner notes that the claim limitation "sintered mixture is derived from a soluble precursor compound of an alkaline earth metal borate or

mixtures thereof in an aqueous suspension of aluminum oxide" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation.

Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Kaduk, Lagos and Trushell (see MPEP 2113). Examiner further notes that Kaduk discloses that the base-coat and the getter (10, 11) are derived from an aqueous suspension solution (col. 2, line 63 to col. 3, line 62).

27. With regard to claim 8, Kaduk discloses that the phosphor layer comprises halophosphate phosphor (col. 3, 56-59).

28. With regard to claim 9, in figure 1, Kaduk discloses that a means for generating ultraviolet radiation is disposed within said lamp envelope (2), said lamp envelope (2) including a filling of an ionizable material and a rare gas and a pair of discharge electrodes (3) between which a discharge takes place during lamp operation (col. 2, lines 12-22).

29. With regard to claim 10, in figure 1, Kaduk discloses a means for generating ultraviolet radiation comprises a filling of an ionizable material and a rare gas within said lamp envelope (2) and a pair of discharge electrodes (3) each adjacent to a respective sealed end (8) of said discharge vessel (col. 2, lines 12-22).

30. With regard to claim 11, in figure 1, Kaduk discloses a low pressure mercury vapor fluorescent lamp (1) comprising: a tubular light transmissive lamp envelope (2)

having opposing sealed ends (8) and an inner tubular surface; a filling of mercury and a rare gas (col. 2, lines 19-23); and a pair of discharge electrodes (3), each arranged at a respective sealed end (8) of said lamp envelope (2); a means for connecting the discharge electrodes (3) to a source of electric potential outside of the lamp envelope (2), leads (4, 5) connected to pin-shaped contacts (not referenced), whereby during lamp operation a gas discharge is maintained between the discharge electrodes (3), which gas discharge emits ultraviolet radiation; a first layer disposed on said inner tubular surface of said lamp envelope (2), wherein said first layer is an ultraviolet radiation reflecting layer comprising a sintered material and a getter material which reacts with contaminants present in the lamp; and a second layer of luminescent material disposed on the first layer (12).

31. Kaduk does not expressly disclose that the first layer is light transmissive or that it comprises a sintered aluminum oxide. Kaduk also does not expressly disclose that the getter material is an alkaline earth metal borate or mixtures thereof.

32. Trushell, in figure 1, teaches a light transmissive first layer (16) that comprises a sintered mixture of aluminum oxide (col. 4, lines 56-61 & col. 6, lines 55-56). Further, Lagos teaches a lamp that includes an alkaline earth metal borate to increase the lumen maintenance in the lamp (col. 2, lines 1-11, col. 3, lines 36 & 62).

33. At the time of invention, it would have been obvious for a person having ordinary skill in the art to construct the Kaduk lamp where first layer is a light transmissive and ultraviolet radiation reflecting layer, comprising a sintered mixture of an aluminum oxide material, taught by Trushell, and a getter material which reacts with contaminants

present in the lamp, said getter material comprising an alkaline earth metal borate or mixtures thereof, taught by Lagos. Using particulate aluminum oxide would have provided a reflecting base-coat layer that increases luminous efficiency. And using the alkaline earth metal borate as the getter material would have improved lumen maintenance and improved brightness.

34. Lagos teaches that the use of alkaline earth metal borates inside the lamp envelope will improve the brightness and lumen maintenance of the lamp, but it does not identify the compound as performing a gettering function (col. 4, lines 32-59). However, Lagos is anticipatory with regard to this limitation because it need only identify the claimed getter material, and it does not need to disclose the specific utility (see MPEP 2121.04).

35. The clause "means for connecting the discharge electrodes (3) to a source of electric potential outside of the lamp envelope" invoke 35 U.S.C. 112, sixth paragraph treatment. Specific means is found in the specification, paragraph [0023] (see MPEP 2181).

36. With regard to claim 12, the modified lamp, discussed in the rejection of claim 11, discloses a first layer comprising a particulate aluminum oxide having a contiguous layer of a borate of an alkaline earth metal or mixture thereof (Kaduk, col. 2, lines 37-46).

37. Examiner notes that the claim limitation "formed by exposing the particulate aluminum oxide material during the lehring process to an effective amount of an alkaline earth metal borate precursor compound" is drawn to a process of manufacturing which

is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Kaduk, Lagos and Trushell (see MPEP 2113). Examiner further notes that Kaduk discloses forming the base-coat (10, 11) by exposing the base-coat mixture during the lehring process to an effective amount of the precursor material of a getter compound (col. 2, line 63 to col. 3, line 62).

38. With regard to claim 13, examiner notes that the claim limitation "first layer is sintered just prior to the envelope being sealed during manufacture of said lamp" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Kaduk, Lagos and Trushell (see MPEP 2113). Examiner further notes that Kaduk discloses that the first layer (10, 11) is sintered just prior to the envelope being sealed during manufacture of said lamp (col. 3, lines 60-63).

39. With regard to claim 14, Lagos teaches getter materials of calcium borate and barium borate (col. 3, lines 36 and 62).

40. With regard to claim 15, examiner notes that the claim limitation "sintered mixture is derived from a soluble precursor material of an alkaline earth metal borate or mixtures

thereof in an aqueous suspension of aluminum oxide" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation has been considered, but not patentably distinct over Kaduk, Lagos and Trushell (see MPEP 2113). Examiner further notes that Kaduk discloses that the first layer and the getter (10, 11) are derived from an aqueous suspension solution (col. 2, line 63 to col. 3, line 62).

41. With regard to claim 16, all of the limitations of claim 16 are discussed in the rejection of claim 1 except for the clause that the getter material is "effective to react with contaminants present in the lamp to the extent that arc instability after ignition of the lamp is substantially eliminated." Examiner notes that this clause is drawn to a method of operating the claimed lamp and does not further limit the structure of the device. Therefore this clause is not germane to the issue of patentability of the device (see MPEP 2114).

42. With regard to claim 17, the range limitations regarding the weight of aluminum oxide and percentage weight of getter material are parameters related to the specific length and radial dimensions of a given embodiment of the lamp. The claim, however, does not recite any dimensions of the contemplated embodiment. The length and radial dimensions of a particular embodiment are considered to be matters of design choice. Consequently the appropriate ranges for aluminum oxide weight and getter material

percentage are considered to be matters of design choice. At the time of invention, it would have been obvious for one with ordinary skill in the art to choose ranges for these parameters that are appropriate to the dimensions of the particular embodiment.

Allowable Subject Matter

43. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter.

44. The prior art of record does not teach or suggest the invention of an electric lamp with an envelope, comprising a luminescent material layer for generating visible light when impinged by ultraviolet radiation, and a base-coat layer between the inner surface of the lamp envelope and the luminescent layer, where the base coat layer comprises a particulate aluminum oxide having a contiguous layer of a getter material on its surface, where the getter material is a alkaline earth metal pyroborate, along with other claimed limitations.

Conclusion


45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Hollweg whose telephone number is (571) 270-1739. The examiner can normally be reached on Monday through Friday 7:30am-5:00pm E.S.T..

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46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Nimesh can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

47. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



TH



JOSEPH WILLIAMS
PRIMARY EXAMINER